

ABSTRACT

The present invention relates to a novel human antibody, and antigen-binding portion thereof, that specifically binds HIV-1 gp120 protein and that
5 has HIV-1 neutralizing activity.

The present invention also relates to a cell line that produces an antibody of this invention. The present invention further relates to a pharmaceutical composition or a kit comprising an antibody or antigen
10 binding portion thereof of this invention.

The present invention further relates to a method of using the antibody of this invention to treat a subject with an HIV-1 infection or prevent a subject from getting an HIV-1 infection.

15 The present invention also relates to a novel method of making an antibody of this invention. The method involves using a non-human transgenic animal.

The present invention further relates to methods of identifying regions of gp120 for use as HIV-
20 1 vaccine.